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SAFETY DATA SHEET

1. Identification

Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
306596	BD PURE HUB™ DISINFECTING CAP - Singles	

Other means of identification

SDS number: 088100278505

Recommended use and restriction on use

Recommended use: Medical or Laboratory Purpose
Restrictions on use: None known.

Manufacturer/Importer/Supplier/Distributor Information

Manufacturer

Company Name:	Becton Dickinson
Address:	1852 10th Ave. Columbus, NE 68601USA
Telephone:	+1-402-563-8782
Fax:	
Contact Person:	Quality lab

Emergency telephone number: Chemtrec +001-703-527-3887 (International)

2. Hazard(s) identification

Hazard Classification

Physical Hazards

Flammable liquids	Category 3

Health Hazards

Serious Eye Damage/Eye Irritation	Category 2A
Specific Target Organ Toxicity - Single Exposure	Category 3

Label Elements

Hazard Symbol:



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Signal Word:	Warning
Hazard Statement:	H226: Flammable liquid and vapor. H319: Causes serious eye irritation. H336: May cause drowsiness or dizziness.
Precautionary Statements	
Prevention:	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233: Keep container tightly closed. P240: Ground and bond container and receiving equipment. P241: Use explosion-proof [electrical/ventilating/lighting/…] equipment. P242: Use non-sparking tools. P243: Take action to prevent static discharges. P280: Wear protective gloves/protective clothing/eye protection/face protection. P264: Wash thoroughly after handling. P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P271: Use only outdoors or in a well-ventilated area.
Response:	P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337+P313: If eye irritation persists: Get medical advice/attention. P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P312: Call a POISON CENTER/doctor if you feel unwell. P370: In case of fire: P378: Use dry chemical powder to extinguish.
Storage:	P403: Store in a well-ventilated place. P235: Keep cool. P233: Keep container tightly closed. P405: Store locked up.
Disposal:	P501: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other hazards which do not result in GHS classification:	-: Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. -: Sparks may ignite liquid and vapor. -: May cause flash fire or explosion.

3. Composition/information on ingredients

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Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
2-Propanol		67-63-0	>50 - <100%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition Comments: A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

General information: Get medical attention if symptoms occur.

Ingestion: Do NOT induce vomiting. Never give liquid to an unconscious person. Rinse mouth thoroughly. Seek medical advice.

Inhalation: Under normal conditions of intended use, this material is not expected to be an inhalation hazard. However: Move the exposed person to fresh air at once.

Skin Contact: Wash skin with soap and water. Get medical attention if symptoms occur.

Eye contact: Flush thoroughly with water for at least 15 minutes. Get medical assistance.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures

General Fire Hazards: Use water spray to keep fire-exposed containers cool.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use: Water spray, fog, CO2, dry chemical, or alcohol resistant foam.

Unsuitable extinguishing media: No data available.

Specific hazards arising from the chemical: No data available.

Special protective equipment and precautions for firefighters

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Special fire fighting procedures:	No data available.
Special protective equipment for fire-fighters:	Wear self-contained breathing apparatus and protective clothing.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. See Section 8 of the SDS for Personal Protective Equipment.
Methods and material for containment and cleaning up:	Absorb spillage with non-combustible, absorbent material. Collect and dispose of spillage as indicated in section 13 of the SDS.
Environmental Precautions:	Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling:	Avoid contact with eyes and prolonged skin contact. Avoid inhalation of vapors and spray mists.
Conditions for safe storage, including any incompatibilities:	Flammable/combustible - Keep away from oxidizers, heat and flames.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
2-Propanol	TWA	400 ppm 980 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	STEL	500 ppm 1,225 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA	400 ppm 980 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	STEL	500 ppm 1,225 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	AN ESL	200 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (12 2010)
	ST ESL	2,000 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (12 2010)
	AN ESL	492 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (12 2010)
	ST ESL	4,920 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (12 2010)

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	TWA PEL	400 ppm 980 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
	STEL	500 ppm 1,225 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (08 2010)
	STEL	400 ppm	US. ACGIH Threshold Limit Values (12 2010)
	TWA	200 ppm	US. ACGIH Threshold Limit Values (12 2010)
	REL	400 ppm 980 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	STEL	500 ppm 1,225 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL	400 ppm 980 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)

Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
2-Propanol (acetone: Sampling time: End of shift at end of work week.)	40 mg/l (Urine)	ACGIH BEI (03 2013)

Appropriate Engineering Controls No data available.

Individual protection measures, such as personal protective equipment

General information: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Eye/face protection: A - Safety Glasses

Skin Protection

Hand Protection: Nitrile gloves are recommended.

Other: No data available.

Respiratory Protection: Respiratory protection not required.

Hygiene measures: Do not get in eyes.

9. Physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: Colorless
Odor: No data available.
Odor threshold: No data available.
pH: No data available.
Melting point/freezing point: No data available.

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Initial boiling point and boiling range:	87.0 °C
Flash Point:	24.0 °C
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	0.858
Solubility(ies)	
Solubility in water:	Completely Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Not known.
Conditions to avoid:	Strong oxidizing agents. Keep away from heat, sparks and open flame.
Incompatible Materials:	Materials to avoid: Water reactive material.
Hazardous Decomposition Products:	Not determined.

11. Toxicological information

Information on likely routes of exposure

Ingestion:	No data available.
Inhalation:	No data available.
Skin Contact:	No data available.

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Eye contact: Causes eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral
Product: No data available.

Dermal
Product: No data available.

Inhalation
Product: No data available.

Repeated dose toxicity
Product: No data available.

Specified substance(s):
2-Propanol — NOAEL (Rat, Inhalation, >= 104 Weeks): 5,000 ppm(m) Inhalation Experimental result, Key study

Skin Corrosion/Irritation
Product: No data available.

Specified substance(s):
2-Propanol — in vivo (Rabbit): Not Classified

Serious Eye Damage/Eye Irritation
Product: No data available.

Specified substance(s):
2-Propanol — in vivo (Rabbit, 1 d): Category 2: Causes serious eye irritation

Respiratory or Skin Sensitization
Product: No data available.

Specified substance(s):
2-Propanol — Skin sensitization:, in vivo (Guinea pig): Non sensitising

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Carcinogenicity
Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):
No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):
2-Propanol — LC 50 (Fathead minnow (Pimephales promelas), 1 h): 11,830 mg/l Mortality
LC 50 (Goldfish (Carassius auratus), 24 h): > 5,000 mg/l Mortality
LC 50 (Western mosquitofish (Gambusia affinis), 48 h): > 1,400 mg/l

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Mortality
LC 50 (Fathead minnow (Pimephales promelas), 48 h): 11,130 mg/l Mortality
LC 50 (Fathead minnow (Pimephales promelas), 96 h): 9,230 - 10,000 mg/l Mortality

Aquatic Invertebrates
Product: No data available.

Specified substance(s):
2-Propanol — LC 50 (Daphnia magna, 24 h): > 10,000 mg/l Experimental result, Key study
EC 100 (Daphnia magna, 24 h): > 10,000 mg/l Experimental result, Supporting study
LC 50 (Water flea (Daphnia magna), 24 h): > 10,000 mg/l Mortality
LC 50 (Brine shrimp (Artemia salina), 24 h): > 10,000 mg/l Mortality
LC 50 (Common shrimp, sand shrimp (Crangon crangon), 96 h): 750 - 1,650 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

Specified substance(s):
2-Propanol — 53 % (5 d) Detected in water. Experimental result, Key study

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)
Product: No data available.

Partition Coefficient n-octanol / water (log Kow)
Product: Log Kow: No data available.

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Mobility in soil: No data available.

Known or predicted distribution to environmental compartments
2-Propanol No data available.

Other adverse effects: No data available.

13. Disposal considerations

General information: Dispose of waste and residues in accordance with local authority requirements.

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging: No data available.

14. Transport information

DOT

UN Number:	UN 1219
UN Proper Shipping Name:	Isopropanol
Transport Hazard Class(es)	
Class:	3
Label(s):	3
Packing Group:	II
Marine Pollutant:	No
Special precautions for user:	Ltd. Qty

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IMDG

UN Number:	UN 1219
UN Proper Shipping Name:	ISOPROPANOL
Transport Hazard Class(es)	
Class:	3
Subsidiary risk:	3
EmS No.:	F-E, S-D
Packing Group:	II
Environmental Hazards	
Marine Pollutant:	No
Special precautions for user:	Ltd. Qty

IATA

UN Number:	UN 1219
Proper Shipping Name:	Isopropanol
Transport Hazard Class(es):	
Class:	3
Subsidiary risk:	3
Packing Group:	II
Environmental Hazards	
Marine pollutant:	No
Special precautions for user:	LQ

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity	Reportable quantity
2-Propanol	100 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Fire Hazard
Immediate (Acute) Health Hazards
Flammable (gases, aerosols, liquids, or solids)
Serious eye damage or eye irritation
Specific target organ toxicity (single or repeated exposure)
Hazards Not Otherwise Classified (HNOC)

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SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity	Reportable quantity
2-Propanol	100 lbs.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
2-Propanol	10000 lbs

SARA 313 (TRI Reporting)

Chemical Identity	Reporting threshold for other users	Reporting threshold for manufacturing and processing
2-Propanol	10000 lbs	25000 lbs.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity
2-Propanol

US. Massachusetts RTK - Substance List

Chemical Identity
2-Propanol

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity
2-Propanol

US. Rhode Island RTK

Chemical Identity
2-Propanol

16.Other information, including date of preparation or last revision

Issue Date: 06/07/2018

Version #: 1.1

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Revision Information:

Further Information: No data available.

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